

AMENDMENTS TO THE SPECIFICATION

Pursuant to 37 CFR 1.121, please amend paragraphs [00027], [00035] and [00039] of the Specification as follows. No new matter has been added.

Amend paragraph [00027] as follows:

[00027] Annulus 322 is defined by facing surfaces of shield 310 and shaft 320. Grooves may be defined on one of the two facing surfaces of shaft 320 and shield 310 so that relative rotation of the two surfaces cause a pumping of fluid toward journal bearing 306. In an embodiment, the radial width of annulus 322 is in the range of 0.015 mm to 0.03 mm. This small width provides a strong capillary retentive force and high shock resistance at first capillary 330 331. A carbon or diamond-like-carbon (DLC) coating can be utilized at annulus 322, either formed on shaft 320 or shield 310 to further protect these adjacent surfaces and to more accurately set the narrow annulus gap.

Amend paragraph [00035] as follows:

[00035] Radial capillary seal 270 employs two capillary seals. The first capillary ~~260~~ 331 is a narrow opening defined between shaft ~~220~~ 320 and shield ~~226~~ 310 within annulus 322. As discussed above, annulus 322 establishes a capillary that provides high shock resistance against fluid loss as well as a small surface area from which evaporation may occur. A second capillary 332 (or meniscus) is defined within channel 316, between facing surfaces of shield 310 and sleeve 330. As fluid volume expands within the motor, or entrained air expands, second capillary 332 accommodates the volume increase. In an embodiment, fluid reservoir 340 is formed on a first side of second capillary 332, and an air plenum 342 is formed on a second side of second capillary 332. Fill pool 312 having a steeper divergence angle than fluid reservoir 340 creates a force gradient to pull any fluid (individual fluid particles or fluid meniscus) from fill pool 312 to second capillary 332. A third fluid meniscus 334 can be formed within fill pool 312 during fluid filling through fill hole 314. Third fluid meniscus 334 can also be temporarily formed within fill pool 312 during a shock event. As described above, third fluid meniscus 334 is situated in an unstable fluid area within fluid pool 312 and the divergence angle of fill pool 312 creates a force gradient to pull a third fluid meniscus 334 from fill pool 312.

Amend paragraph [00039] as follows:

[00039] In an alternative embodiment, the capillary seal of the present invention is utilized with a conical fluid dynamic bearing as shown in **Fig. 6**. Similar to the rotating shaft design of FIG. 2, the conical design shown in FIG. 6 includes a rotatable shaft 600, stationary sleeve 602, and stationary counterplate 604. A separation barrier between journal bearing 622 and conical bearing 624 is created by fill hole 608. Fill holes 620 and 608 provide fluid to separate bearings. The present invention provides, in an embodiment, two separate capillary seals and separate fill pools that communicate with these separate bearings.